


4. b) $\mu = 70$ $\sigma = 2$

(CALC)  $NCDF(60, 71, 70, \frac{2}{\sqrt{10}}) = .9431$

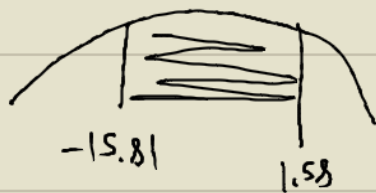
(HAND) $z = \frac{X - \mu_{\bar{x}}}{\sigma_{\bar{x}}}$ $\mu_{\bar{x}} = \mu = 70$
 $\sigma_{\bar{x}} = \frac{\sigma}{\sqrt{n}} = \frac{2}{\sqrt{10}} = .632455532$

$X = 60$
 $z = \frac{60 - 70}{.632455532}$

$z = -15.81$

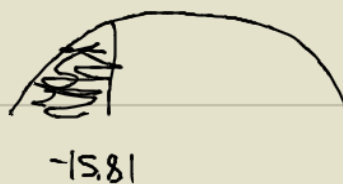
$X = 71$
 $z = \frac{71 - 70}{.632455532}$

$z = 1.58$



$.9429$

-



$.0002$

= $.9427$